## **CHAPTER 26**

## EMERGENCY ESCAPE BREATHING DEVICE

26-1. **GENERAL.** This chapter contains information about the Scott EEBD. This device is authorized for use onboard US Army watercraft.

#### WARNING

The EEBD is not to be confused as a fire fighting device, such as the OBA. It is to be strictly used as an emergency escape device. Improper use of this equipment may result in injury or death. Personnel should receive adequate training prior to use, including the limitations to which the equipment is subject. Personnel are reminded that there is no substitute for alertness, common sense, and self-discipline.

- 26-2. **DESCRIPTION.** The EEBD is a self-contained, hooded, emergency breathing device (see Figure 26-1, page 26-2) used for escape from compartments contaminated by smoke, fluorocarbon refrigerants, or other atmospheric toxic gases. The EEBD will also provide oxygen to trapped personnel awaiting rescue in contaminated atmospheres. It will also enable the wearer to escape to the weather deck of Army watercraft. The EEBD consists of a howl and a life support pack. The hood is made of a flame resistant material and a clear window for viewing. The life support pack consists of the following:
  - An oxygen source in the form of a solid chemical generator which produces oxygen.
- A mechanical chemical scrubber for the removal of carbon dioxide and water vapor from the system gases.
- A venturi flow tube which acts as a pump to recirculate the gases through the closed circuit loop.

The system maintains a positive pressure inside the hood to prevent smoke and toxic gases from entering. The EEBD will operate for 15 minutes after being activated and has a shelf life of 15 years from the date of manufacture. There is a view port in the stowage case for observing a humidity indicator and the date of manufacture. If the humidity indicator has changed color from blue to clear or pink, or if the date of manufacture has expired, replace the EEBD.

26-3. **STOWAGE.** The EEBD is packaged in a vacuum sealed plastic bag and then placed in an orange, plastic stowage case. The EEBD is stowed in non-shock rated cabinets. Lead wire seals or other easily opened tamper guards may be used on the cabinets for identifying any tampering. There is also a small tamper sticker on the orange plastic case. The purpose of this sticker is to ensure that the plastic case has not been opened.

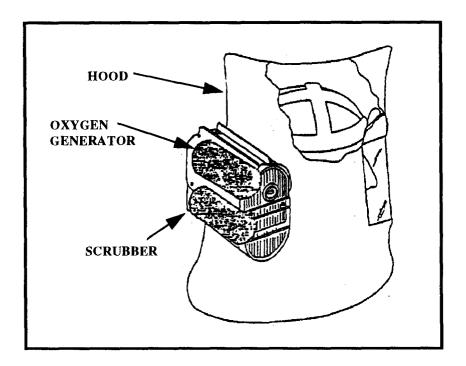


Figure 26-1. Emergency breathing device (fully donned)

- 26-4. **OPERATING PROCEDURES.** The following instructions will enable users to familiarize themselves with those procedures which are necessary to operate the escape device in actual in-service conditions. These instructions will also describe the capabilities and limitations of the equipment in so far as the user is concerned.
- a. **Removal From Bag.** After removing the escape device from its storage container, grasp the device in one hand and the red tear strip with the other. Pull the tear strip until it is separated from the remainder of the bag and remove the device (see Figure *26-2*, page *26-4*).
- b. **Actuating the Device.** Insert a finger into the ring with the red marker tab marked "PULL TO ACTUATE". Pull hard in the direction shown in Figure 26-3, page 26-4. The ring must separate from the device while making a "snap" sound. A slight hissing sound will be heard, indicating the escape device is working.
- c. **Donning the Device.** The donning of the EEBD is quick and simple (see Figure 26-4, page 26-5). This makes it suitable for situations where there is little time to seek safety from contaminated atmospheres. To don the EEBD perform the following:
  - Bend slightly from the waist.
  - Insert the thumbs inside the neck seal and exert an outward pull to spread the seal.
- Bring the escape device up to the face while still bending over and place the chin into the opening of the neck seal.
  - Pull the device up and over the head.
- Stand upright and pull down on the hood so that the retaining straps inside the hood create a snug fit around the top of the head.

Be sure the neck seal is in contact with the neck with no clothing or hair creating a gap so as to admit the outside atmosphere. Proceed via the nearest exit way to the crafts weather deck.

#### **NOTE**

Personnel wearing eyeglasses may find it easier to put the escape device on in an upright position, placing the chin in the hole and stretching it up and over the head.

d. **Removal and Disposal.** After reaching a safe outside atmosphere, grasp the escape device by the upper edge of the hood and pull forward, over the front of the head and off. Discard the escape device. Disposal of an escape device which is still hot or generating oxygen should be in an area free of fire hazards.

#### **WARNINGS**

Due to the oxygen saturation of the hair, do not smoke or become exposed to fire or flames for several minutes after removing the escape device.

Once the escape device has been initiated, it cannot be turned off. As soon as the oxygen generator has been expended, the flow will automatically y cease. When the hissing sound stops, the oxygen flow has stopped. If this occurs while the user is still in an undesirable atmosphere, the user should immediately put on a new device. Remember, the expended one is not producing oxygen and the wearer will suffocate if not removed.

- 26-5. **MAINTENANCE.** No scheduled maintenance is required to be followed in order to ensure the escape device will operate when the pin is pulled. However, visually inspect the device monthly. Perform the following to conduct scheduled maintenance.
- Check integrity of tamper seal. If broken, open the storage container and check integrity of vacuum in barrier envelope. Also check that the humidity indicator has not changed from blue in color to clear or pink.
- If tamper seal is broken, check humidity indicator through the round window in the storage container to verify it has not changed from blue to clear or pink.
- 26-6. **TRAINING EEBD**. The training EEBD is a nonfunctional copy of the operational EEBD. This unit is labeled as a training unit and contained in a blue rather than orange plastic case. Stow and lock up the training EEBDs away from the operational units. This is to avoid mistakenly using a training unit during an emergency when darkness or smoke prevents seeing the labels or different color. The training unit allows personnel to remain proficient in the use of the EEBD without expending an actual EEBD unit.



Figure 26-2. Removing unit from bag

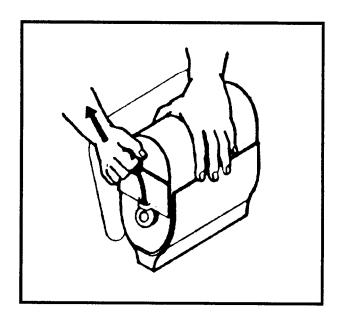


Figure 26-3. Pull actuating ring to activate

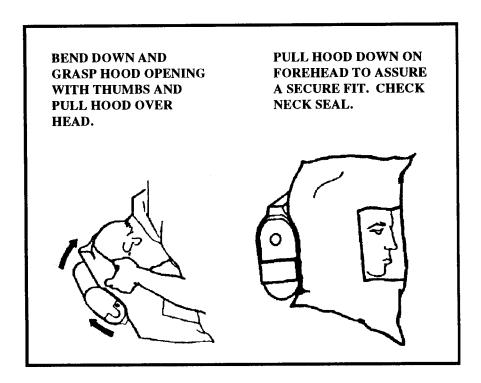


Figure 26-4. Fully donning the EEBD

# 26-7. **PROCUREMENT.** Order the following by their appropriate NSN.

- Emergency Escape Breathing Device (NSN 4240-01-116-9888, Cage Code 53655).
- Emergency Escape Breathing Device (training) (NSN 4240-01-116-9889, Cage Code 53655).
  - Stowage Cabinet, Non-shock Rated (NSN 2040-01-162-3206).
  - Tamper Seal Sticker (NSN 4240-01-159-1986).

#### **WARNING**

The EEBD has no replacement parts. It is a one-time use throw away device.

The EEBD training unit has several replacement parts, so it may be used over and over. These parts, with their NSN or part number, include the following:

- Neck Seal (NSN 4240-01-152-8776).
- Lanyard (NSN 4240-01-152-8777).
- Stowage Bag (NSN 4240-01-152-8778).
- Case Assembly (Part number 802397 -03).\*
- Tool, Reset (Part number 10005595).\*

<sup>\*</sup>Order part number items from: Scott Aviation, A Figgie International Company, 225 Erie Street, Lancaster, New York 14086; Telephone: (716) 686-1668.

# **NOTE**

The replacement training unit stowage bag is equipped with drawstrings rather than a tear strip.

26-8. **DISPOSAL.** Dispose of unusable EEBDs by activating in a clean and well ventilated area, Wait until hissing noise has stopped (approximately 15 minutes). Let the EEBD cool, then follow standard procedures for disposing of similar sized solid waste. If the device does not activate for 15 minutes, totally immerse the device in a container of fresh water, then discard.

# **NOTE**

EEBD cantsters must be disposed of IAW HAZMAT/ Environmental SOP.